

The Sheet-Board and the Marketing Research

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Abstract: Known under the name of fixed sample, longitudinal sample or continuous survey, the panel is in fact a constant sample, constituted (from nominated persons) for a relatively long period of time (ten or thousand of years), on which some observations are made, measurements or repeated determinations, at constant intervals of time. That is why, the information used from its application have a greater utility, being capable to illustrate, not only the given situation (the static one, as other types of surveys) but also the evolution in time (dynamics) of the phenomenon which is the object of the market research.

Once constituted (respecting the principles and conditions that make it to be representative and operational), the panel will be activated every time it is necessary to up-date the information. To each member of it, the firm that organizes the market research send, at certain time intervals, (as a rule) the same questionnaire (or – sometimes – questionnaires more or less different), asking for answers respecting some fixed terms. In order to get the acceptance of cooperation from their part, one can appeal to give them incentives (certain sums of money or little gifts).

The gathering of information from one panel to another can be done by mail (by e-mail also) by telephone, or through direct contact. In order that these information correspond to the goal of the research, in the research scheme there must exist:

- sufficient data fro the identification of the subjects being part of the panel (name, address, age, sex, profession), which permit the rapid discover of those furnishing random information or intended to be false;
- training or trial periods for the subjects
- ways to check the veridicality and sincerely of the information (the correlation of the profession with the incomes declared, the level of education with the structure of the purchased merchandise etc.);
- experimentation of the questionnaires etc.

In many market researches the panels are indispensable.

1. Advantages and risk factors

Being considered one of the most modern instruments that can be used in market research, the area of using the panel is in a continuous growth, a thing that can be explained by the advantages that it presents. Thus panels:

- assure a high rate of answers (70-80%);
- to follow the effects that a succession of marketing actions produce on one or many markets;; can put into evidence the factors responsible for the most significant changes within the consumers', middlemen's or competitors' behavior;
- furnish the most useful information in order to teach and analyze the tendency of the local markets, regional, national or international ones.
- as a result of the specialization of the sample unity with the problems making the object of the inquiries (as their long utilization in the process of furnishing information), their capacity to give complete and deeply profound answers increases;
- due to the fact that they are used a long period of time having the same component, the costs that they suppose (which initially can be relatively big) are spread upon some successive researches, being lower than in the case of other types of surveys. Obviously, it is about the research costs.

Although the use of panels presents some remarkable advantages, when establishing the decisions regarding their opportunity it is necessary to take into consideration the **difficulties and the risk factors**. Hereinafter there are mentioned some facts in this direction:

1) Obtaining the acceptance from the part of the subjects that are about to become part of the panel (a long time) is not an easy thing to be done as many firms and even persons refuse to cooperate (from different subjective or objective reasons). It is appreciated that from an amount of thousand persons asked to become part of a panel, about 90 refuse this action. As a result, it is very difficult to assure and then keep the representation of the sample. In such situation it is recommended the offering of incentives.

2) Some of the subjects Some of the subjects that accepted initially to take part in the panel, after realizing (during the research) what this action supposes, refuse to continue collaboration, fact that makes necessary the recreation of the panel (fact that is difficult to be realized).

3) There exist then subjects of the panel which go out from the component of the panel (due to retirement, death, residence changing, leaving the place), they being replaced during the process (with the same difficulties).

4) Another part of the initial subjects becomes, in time, atypical, being necessary to be replaced. For example some person, when aging become atypical and they need to be eliminated from the panel an replaced by some younger ones, in order to keep the age representation. The same thing happens with subjects giving false information or registering a delay in furnishing the answer.

5) Keeping a long period of time the same persons within the composition of the panel we can increase their vigilance in order to avoid mechanic thought and stereotypy in furnishing information.

In order to avoid the limitation of the negative effects mentioned above we recommend a periodical re-fresh of the panels.

2. The constitution scheme

Herein after we want to present a standard scheme necessary to be respected when we want to set up a panel and establish its functioning.

In big lines, the panel is constituted after the general rules of the sampling. The scheme we exemplify herein after resembles those when the sampling is executed in steps and phases, being a combination of both.

Step 1. The problem to be researched is defined in time by help of the panel.

Step 2. States the categories (economic, socio-demographic, political and of other nature) from which belong the subjects to be discussed in the panel.

Step 3. The territory to which the conclusions will be extended are split into *provinces and regions* (such as, in the case of Romania, the three historical regions - Moldavia, Transylvania, and Valachia)

Step 4. Each province structures itself on geographical and administrative areas, constituting a sample of such units (lets say *counties*)

Step 5. In each area there is constituted a sub-sample of habitats (or families), forming the habitats samples (families, firms, stores etc.).

Step 6. from selected area there will be selected a sub-sample. This will be done in such a way that every sample be properly represented by all the categories of population. On this occasion a reserve list will be set up in order to have a reserve for the change of the elements in the initial sample.

Step 7. A person from each family will designated in order to furnish the information and being a part of the proper-said panel.

Step 8. Every family in the panel is visited and explanations are given about the aim of the research, trying to obtain the necessary collaboration agreement from the part of the subject. In case of a refuse the principle panel is re-build with the help of the reserve list illustrated at step 6.

Step 9. The instruction of the subjects is done as they be capable to answer the questions.

Step 10. Trial information are approved and gathered.

Step 11. As a response to the obtained results at the end of the trials, the component of the panel is settled.

During the execution of the research, there are possible other kinds of actions (rebuilding, or actualization) of the panels.

3. Types of panels

Within the field of marketing researches different categories of panels are used. The most known are those formed of consumers, traders and experts.

a) **Consumers panels** (the users of certain goods) are the most frequent, being present under three forms:

a₁) the proper-said consumers, formed of individual persons representative for collectivities to which they belong, getting from them information used later within the market research;

a₂) family panels, used in any kind of market researches aiming the consume demand from the part of the population.

a₃) Firm panels, at which one appeal in case of the products making the object of the productive consume.

Even if the panel is situated in the second or third category, for the fast gathering of the information referring to family or firm, as rule, the persons who must answer the questionnaires are named, and in the end the persons panels being the most used ones.

Market researches regarding the families' budgets represent the most significant example of using panels from the part of the consumers.

b) **Traders panels** (wholesalers and retailers), to which one can assimilate other categories of middlemen, too), are more and more used in order to study some important aspects of their activity, such as; supplying, sales, stocks, prices, products, publicity etc.

The information gathered by their help are very useful both for traders and for firms which use them in order to distribute their products. With their help one can gather data about consumers (regarding fidelity, claims, preferences), and about the competitors, too.

c) **Experts panels** are constituted from well-known specialists, recognized for their professional performances, of diverse professions and occupations (engineers, sociologists, psychologists, doctors, economists, lawyers), that have a relation with the current preoccupations of the marketing researches, helping in gathering ideas and information.

Usually, the supposed effort (material and financial) of constituting the panels is very big, the specialists refusing to waste their time and ideas if there are not given important incentives.

The fields of research in which panels can be used are very diverse.

4. Treating non-responses

The majority of representation errors from marketing selective researches are due to the non-coverage or to non-responses.

a) **Non-coverage** can be interpreted in two ways:

a₁) *the un-coverage of the general collectivity towards the base of the sample*, thing due to the use of some base of non-actualized, selection or simply incomplete, the probability to extract from the sample of the missing elements being null. For example, the use of telephone-books as a base to set up samples let the persons without having a telephone post no possibility to be selected.

a₂) *the non-coverage of the selection collectivity* by the sample, due to the fact that some subjects chosen to be included within the initial selection collectivity can not be found in the "territory" (from different reasons), remaining outside the sample

b) **Non-responses** appear when:

b₁) the aimed elements in the selective marketing research can not be found, case in which we have to treat with coverage non-responses;

b₂) although they are found the persons do not accept (or they can not) furnish the solicited information, when we are in front of the non-responses by refuse.

The refuses as well as the incapacity to offer information, can have different causes: the desire to keep the secret of some information, the illiteracy (when using written questionnaires) etc.

According to some studies there resulted the conclusion that the persons used in the marketing research by means of telephone inquiries are split into five categories:

- 1) *ready* at any time to offer information (15%);
- 2) *available* to offer answers only after some insurances (50%);
- 3) *available* to answer only after important insurances (15%);
- 4) *impossible* to be convinced to collaborate (10%);
- 5) *incapable* of answering or be contacted (10%).

The measuring and the illustration of the answers rate is an important problem in all marketing researches.

The rate of answers can be estimated with the help of the ration between the number of subjects which accept to collaborate (with or without insurances from the part of the operators), furnishing the information that these ones are soliciting, and the total number of subjects included into the initial sample. Subtracting from one the size of this indicator, one gets the rate of non-responses.

Among the factors of which depends its size, it could be mentioned:

- *the interest* of which the approached subject enjoys among the respondents (the larger this one is, the lower the rate of responses is);
- *the time* when the subjects are implied in gathering data; between this time and the rate of non-responses there existing a reverse ratio;
- *the formula for opening* the discussions by those who are responsible for approaching the subjects included in the sample (used words, voice, face expression etc. being essential for getting the cooperation agreement)

- modalities to offer incentives to subjects (the little gifts or the payment of a n insignificant sum of money make sometimes pleasant surprises.);
- announce in advance the subjects included in the sample (by telephone or short letters);
- re-contact the subjects that initially refused to cooperate etc.

There are many *possibilities to treat non-responses*.

1) The first of them is the adjustment of the results. Thus, if in a sample chosen for the intention to buy a new product, the rate of non-responses is of 60%, and among the respondents 70% declare that they are ready to purchase it, one may conclude (but without a solid base) that the percent of the non-responders accepting the new product is 70% (supposing that the ration of non-responders accepting the product is equal with that of responders).

2) On the other hand, if one considers that 60% of the subjects that refuses cooperation are not interested by the new offer, the adjusted ratio of those accepting it will be of:

$$70\% \times (100 - 60)\% = 70\% \times 40\% = 28\%.$$

In other words, it is considered that the acceptability percentage of 70% remains valid only for the rest of 40% of the remained non-respondents.

3) A third modality to appreciate the rate of non-responses is based on the probability that the subjects can be split into three categories:

- I. persons that are at home 70% from the duration of a day;
- II. persons that are at home 50% from the duration of a day;
- III. persons that are at home 30% from the duration of a day;

The conclusion is that the coverage of subjects in the main sample that can be contacted at their homes would be of 70%, 50% and 30%.

Here are some computations as the groups from the sample will have to be ponderated with some indicators (k_i), calculate the relation:

$$k_i = \frac{1}{p_i},$$

where p_i - probability that subjects from group i be found at home (the proportion of the subjects in group i)

In our example:

$$p_I = \frac{1}{0,7} = 1,43; \quad p_{II} = \frac{1}{0,5} = 2; \quad p_{III} = \frac{1}{0,3} = 3,33.$$

As a result the effective number of subjects included in each group i of the sample will be settled as follows:

$$n'_i = n_i k_i,$$

in which: n_i, n'_i - the initial number, respectively adjusted to the subjects in group i .

Thus if in the first group there were initially 25 persons, after the correction their number will be:

$$n'_I = 25 \cdot 1,43 = 36 \text{ persons}$$

.From all the facts presented above it results that samples represent a methodological key factor in most marketing researches.

Bibliography

D. R. Lehmann, S. Gupta, J. H. Steckel: *Marketing Research*, Addison - Wesley, New York, 1998, p. 94-97
F. Wiseman, Ph. McDonald: *Noncontact and Refusal Rates in Consumer Telephone Surveys*, in ***Journal of Marketing Research***, no. 16, November, 1979